MONTGOMERY WATSON

January 8, 2001

Mr. Kevin Adler
Remedial Project Manager
U.S. Environmental Protection Agency
Region V, SR-6J
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re: Groundwater Treatment System
Quarterly Monitoring Report – Third Quarter 2000
ACS NPL Site

Dear Mr. Adler:

Please find enclosed two copies of the Groundwater Treatment System, Quarterly Monitoring Report, Third Quarter 2000 for the American Chemical Service NPL Site in Griffith, Indiana. This report is submitted in accordance with the PGCS Performance Standard Verification Plan, April 1997.

We are also sending three copies of this report to IDEM and one copy of this report to Black & Veatch Waste Systems. If you need additional copies of this report please let me know and we can forward them to you, or whomever you specify.

Sincerely,

MONTGOMERY WATSON

Peter J. Vagt, Ph.D., CPG
Project Manager

cc: Sean Grady, IDEM (3 copies)
Larry Campbell, B&V (1 copy)
ACS Technical Committee (1 copy to each member)

TMK
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2090601.0116

27755 Diehl Road
Suite 300
Warrenville, Illinois
60555

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Serving the World's Environmental Needs

GROUNDWATER TREATMENT SYSTEM
QUARTERLY MONITORING REPORT
THIRD QUARTER 2000

AMERICAN CHEMICAL SERVICE NPL SITE
GRIFFITH, INDIANA

Montgomery Watson File No. 2090601

Prepared For:

American Chemical Service NPL Site RD/RA Executive Committee
Griffith, Indiana

Prepared By:

Montgomery Watson
27755 Diehl Road, Suite 300
Warrenville, Illinois 60555

January 2001

MONTGOMERY WATSON

GROUNDWATER TREATMENT SYSTEM
QUARTERLY MONITORING REPORT
THIRD QUARTER 2000

AMERICAN CHEMICAL SERVICE NPL SITE
GRIFFITH, INDIANA

Prepared For:

American Chemical Service NPL Site RD/RA Executive Committee
Griffith, Indiana

Prepared by: _____ JANUARY 8, 2001
Robert A. Adams, P.E. — Date
Senior Engineer

Approved by: _____ Jan 8, 2001
Peter Vagt, Ph.D., CPG — Date
Project Manager

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APPENDICIES

1.0 INTRODUCTION

Montgomery Watson, on behalf of the ACS RD/RA Executive Committee, started up the on-site groundwater treatment system at the American Chemical Service NPL Site (ACS Site) in Griffith, Indiana on March 13, 1997. The groundwater treatment plant (GWTP) system was designed to treat groundwater from the Perimeter Groundwater Containment System (PGCS) and certain volumes of water from the Barrier Wall Extraction System (BWES). The treatment consists of a phase-separator for oil and free product removal, equalization tanks, a UV-oxidation unit for destruction of organic constituents, and an air stripper to remove methylene chloride and other organics. The treatment also includes a chemical precipitation and clarification unit to remove metals, a sand filter to remove suspended solids, and activated carbon vessels for final polishing of the treated groundwater.

Currently, an activated sludge treatment process is being added to the process to reduce the volatile and semivolatile organic compounds (VOCs and SVOCs) in the collected groundwater. The activated sludge treatment process also reduces the amount of activated carbon required in the treatment process. The activated sludge system is being phased in, along with the other upgrade components, and is scheduled to be fully integrated by the end of the year 2000.

The treated effluent from the treatment system is discharged to the nearby wetlands, west of the treatment system, in accordance with Agency approvals. This Groundwater Treatment System report summarizes effluent analytical data and water level gauging data collected from July 2000 through September 2000.

2.0 COMPLIANCE MONITORING

2.1 INTRODUCTION

Effluent samples were periodically collected from the treatment system to demonstrate compliance with the discharge limits (Table 2.1) established by Indiana Department of Environmental Management (IDEM) and United States Environmental Protection Agency (U.S. EPA). The approved Performance Standard Verification Plan (PSVP) requires quarterly effluent sampling for BOD, TSS, SVOCs, Metals, and PCBs in the system, and monthly effluent sampling for VOCs, as shown in the table below. To be conservative, the effluent sampling is being conducted on a monthly basis for all analytes. The samples will continue to be collected on a monthly basis until the treatment system is operating in a relatively steady state after completion and startup of the groundwater treatment plant upgrades.

Sampling and analyses were performed in accordance with the Agency-approved PSVP Quality Assurance Project Plan (QAPP) prepared by Montgomery Watson for the ACS RD/RA Executive Committee in April 1997. Quality control measures were also instituted in accordance with the PSVP QAPP. The following paragraphs present details on sampling and analyses, and also summarize the analytical data for the treatment system effluent.

Sampling Frequency Schedule - Groundwater Treatment System

Analytes	Cumulative Time From Startup*	Frequency
Flowrate and pH	–	Continuous
BOD, TSS, SVOCs and Metals	181 days onward	Once per quarter
VOCs	31 days onward	Once per month
PCBs	181 days onward	Once per quarter
PCBs in Sediment (one location)	–	Once per year

*Note: System startup occurred March 13, 1997

2.2 SAMPLING AND ANALYSES

Effluent samples were collected each month during the third quarter 2000. For this reporting period, the samples were collected on the following days:

- July 12, 2000
- August 2, 2000
- September 14, 2000

Effluent samples were collected directly from a sample tap on the effluent line of the treatment system. All samples were placed in contaminant-free containers, as specified in

We are to be updating this?

the U.S. EPA Specifications and Guidance for Obtaining Contaminant-Free Sample Containers (U.S. EPA, 1992). Appropriate sample containers and preservatives, as specified in the QAPP, were used to collect and preserve the samples. Following sample collection, the sample containers were refrigerated at or below 4° C in coolers. Chain-of-Custody forms were prepared to track the transfer of samples from the treatment system to the laboratories. In accordance with the approved QAPP, the effluent water samples were analyzed by the following analytical methods for the following parameters:

Parameter	Analytical Method
VOCs	SW-846 8260B
SVOCs	SW-846 8270C
Pentachlorophenol	SW-846 8270C and SIM
Pesticides/PCBs	EPA 608
Metals (Excluding Mercury)	SW-846 6010
General Water Quality Parameters (TSS and BOD-5)	EPA 160.2 and 405.1
Mercury	SW-846 7470
pH	EPA 150.1

2.3 ANALYTICAL RESULTS

No exceedences of any parameters were reported during this period of operation. The effluent monitoring data, summarized in Table 2.2, verifies that the system effluent was consistently compliant with the discharge limits presented in Table 2.1. The analytical data sheets are provided in Appendix A.

Third party data validation was performed in accordance with U.S. EPA National Functional Guidelines for Organic Data Review. Validation qualifiers are listed in Table 2.2 and are written in the margin of the analytical data sheets provided in Appendix A. The "non-detect" results for July, August, and September for the analyte 2-Butanone have been flagged "R" by the validator for "rejected", meaning quality control indicates the data is not usable. Also, the "non-detect" result for acetone for the month of September has been flagged "R." The validator has recommended we not use these data because of instrument calibration discrepancy. However, it is likely that these "non-detect" results do indeed accurately characterize the effluent because there have not been any 2-Butanone or acetone exceedences in previous, non-qualified samples. The laboratory has been notified of the data validator's findings regarding the 2-butanone and acetone analysis and will work to correct the discrepancy in their instrument calibration.

Who/what is the Independent Validator?

3.0 TREATMENT SYSTEM PROCESS MODIFICATIONS

During the third quarter of 2000, the GWTP continued to treat groundwater collected by the BWES and PGCS. Construction of the GWTP upgrades began in August 1999 and continued through the third quarter of 2000.

The following summarizes the work performed during this monitoring period:

- The equalization/aeration tank (T-102) was delivered to the site and installed.
- The catalytic oxidizer/scrubber (ME-106) was installed.
- The existing GWTP Operation and Maintenance Manual continued to be revised to incorporate the upgrades.
- The activated sludge plant was regularly monitored in order to maximize the treatment capabilities and optimize operation of the mechanical components of the plant.
- GWTP compliance sampling and analysis continued to be conducted monthly.
- The mechanical and electrical/instrumentation subcontractors mobilized and began work in August 2000. They continue to install piping, conduit, process pumps, and instrumentation. Startup and optimization will continue in a staged manner. New equipment will be brought online as the piping and controls for the various components are completed.
- The electrical/instrumentation subcontractor continued upgrading the programmable logic control center.

This upgrade work is expected to be completed in December 2000. Full scale implementation, trouble shooting, and fine tuning will be conducted during December 2000. Full integration is scheduled for January 2001.

4.0 PGCS AND BWES GAUGING ACTIVITIES

The PGCS trench groundwater extraction wells were operated in "auto" mode continuously throughout the months of July, August, and September 2000. In "auto" mode, each of the PGCS extraction wells are set to turn on or off automatically based on water levels within tank T-2. This mode is used to control the flowrate through the treatment system.

In accordance with the PSVP for the Site, a discussion on the effect of the PGCS and BWES on the water table near the Site is presented in each quarterly monitoring report. This section presents a discussion on the groundwater elevation findings during the months of July through September 2000. Groundwater elevation measurements were collected throughout the Site on September 18, 2000. However, to keep track of the groundwater table inside the barrier wall, levels were collected from the BWES piezometers (P-3, P-32, P-49 and P-96) on a regular basis, as shown in the table below. The levels from these four piezometers are shown in the table below. The water elevations inside the barrier wall are depicted graphically on Figure 4.1.

	Water Table Elevation			
Date	**P-3**	**P-32**	**P-49**	**P-96**
July 13, 2000	635.47	635.32	634.88	630.69
July 25, 2000	634.97	634.52	633.88	629.99
August 11, 2000	634.67	634.52	633.98	629.79
September 8, 2000	634.37	634.12	633.68	631.49

The barrier wall was constructed to isolate a contaminated zone under the Site, and the BWES was installed to collect the impacted water within the barrier wall. A series of 16 piezometers were installed in eight pairs, one piezometer of each pair on either side of the barrier wall at each of the BWES trench locations. This allows measurement and tracking of water levels in order to ensure that the barrier wall is serving its designed function.

Groundwater elevations inside and outside the barrier wall were monitored on September 18, 2000. Figure 4.3 illustrates these groundwater elevations. Fluctuations in the gradient across the barrier wall occur due to seasonal groundwater conditions, pumping rates from the BWES, and infiltration through the Site. However, the groundwater elevations measured in the piezometers indicated that the elevations inside the barrier wall were all 1.04 feet to 2.98 feet higher than the elevations outside the barrier wall. This data demonstrates that the barrier wall is successfully performing the intended function of isolating and containing the groundwater from the known source areas of the Site inside the barrier wall. Water levels from the piezometers on September 18, 2000 are presented below:

Piezometer	Location[1]	Water Level	Difference[2]
P-93	Outside	633.10	1.04
P-49[3]	Inside	634.14	
P-95	Outside	630.98	1.86
P-96	Inside	632.84	
P-97	Outside	631.06	2.19
P-98	Inside	633.25	
P-99	Outside	631.89	2.89
P-100	Inside	634.78	
P-101	Outside	632.08	NA
P-102[3]	Inside	NM	
P-103	Outside	631.81	2.98
P-104	Inside	634.79	
P-105	Outside	632.29	1.42
P-106	Inside	633.71	
P-107	Outside	631.15	2.92
P-108	Inside	634.07	

Notes:

1. Location indicates inside or outside the barrier wall.
2. A positive value indicates that the water level is higher within the barrier wall. A negative value would indicate that the water level is lower within the barrier wall.
3. Piezometer P-94 was damaged and could not be measured this monitoring period. Therefore the groundwater level from piezometer P-49 was used to calculate the hydraulic gradient. Piezometer P-102 could not be measured this monitoring period because the well cap was under water.

NA Value could not be calculated from single measurement.

NM Well not measured.

In general, water levels inside the barrier wall are currently several feet higher than the water levels outside the barrier wall. It is not the intent to continuously operate with the higher groundwater levels inside the barrier wall. The groundwater levels within the barrier wall during this monitoring period were balanced to maintain a safe level that would not overflow the barrier wall. At the same time, these groundwater levels minimize the amount of groundwater within the barrier wall that require collection and treatment in the Groundwater Treatment System, thus avoiding excessive granular activated carbon (GAC) usage. Upon completion of the groundwater treatment plant and BWES upgrades, the groundwater pumping rate of the BWES will be increased to lower the water table inside the barrier wall for operation of the in-situ soil vapor extraction systems to be installed in accordance with the approved Final Remedy.

Beside the eight pairs of piezometers installed specifically to monitor water level differences across the barrier wall, there are several other previously existing monitoring well and piezometers in the vicinity of the barrier wall. These are included on maps of the Site.

TMK/RAA/PJV
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Table 2.1
Groundwater Treatment System Effluent Discharge Limits
American Chemical Service NPL Site
Griffith, Indiana

Groundwater Quality Parameter	Effluent Standard (Limit)
General Water Quality Parameters	
PH	6 - 9 S.U.
BOD-5	30 mg/L
TSS	30 mg/L
Inorganics	
Arsenic	50 µg/L
Beryllium	NE
Cadmium	4.1 µg/L
Manganese	NE
Mercury	0.02 µg/L (w/DL = 0.64)
Selenium	8.2 µg/L
Thallium	NE
Zinc	411 µg/L
Volatile Organics	
Acetone	6,800 µg/L
Benzene	5 µg/L
2-Butanone	210 µg/L
Chloromethane	NE
1,4 – Dichlorobenzene	NE
1,1 – Dichloroethane	NE
1,2 – Dichloroethene – cis	70 µg/L
Ethylbenzene	34 µg/L
Methylene chloride	5 µg/L
Tetrachloroethene	5 µg/L
Trichloroethene	5 µg/L
Vinyl chloride	2 µg/L
4 – Methyl - 2 – pentanone	15 µg/L
Semi-Volatile Organics	
bis(2 – Chloroethyl) ether	9.6 µg/L
bis(2 – Ethylhexyl) phthalate	6 µg/L
Isophorone	50 µg/L
4 – Methylphenol	34 µg/L
Pentachlorophenol	1 µg/L
PCBs	
PCBs	0.00056 µg/L (w/DL = 0.1 to 0.9)

Notes:
NE = No effluent limit established.
DL = Detection limit

Table 2.2
Summary of Effluent Analytical Results - Third Quarter 2000
Groundwater Treatment System
American Chemical Service NPL Site
Griffith, Indiana

Event	Month 38	Month 39	Month 40	
Date	7/12/00	8/2/00	9/14/00	Effluent Limits
pH	7.6 /J	7.43 /J	7.48	6-9
TSS	ND /UJ	ND	4.3	30
BOD	2.2 /J	ND /UJ	ND	30
Arsenic	5.7 B/	ND	ND	50
Beryllium	ND	ND	ND	NE
Cadmium	ND	ND	ND	4.1
Manganese	163	62.4	326	NE
Mercury	ND	ND	ND	0.02 (w/DL = 0.64)
Selenium	ND	ND	ND	8.2
Thallium	ND	ND	ND	NE
Zinc	ND	21.8	13.6 B/	411
Benzene	ND	ND	ND /UJ	5
Acetone	8 /J	3 /J	ND /R	6,800
2-Butanone	ND /R	ND /R	ND /R	210
Chloromethane	ND	ND	ND /UJ	NE
1,4-Dichlorobenzene	ND	ND	ND /UJ	NE
1,1-Dichloroethane	ND	ND	ND /UJ	NE
cis-1,2-Dichloroethene	ND	ND	ND /UJ	70
Ethylbenzene	ND	ND	ND /UJ	34
Methylene chloride	2 B/	1	ND /UJ	5
Tetrachloroethene	ND	ND	ND /UJ	5
Trichloroethene	ND	ND	ND /UJ	5
Vinyl chloride	ND	ND	ND /UJ	2
4-Methyl-2-pentanone	3 U/	3	ND /UJ	15
bis (2-Chloroethyl) ether	ND	ND	ND	9.6
bis(2-Ethylhexyl) - phthalate	ND	ND	ND	6
4 - Methylphenol	ND	ND	ND	34
Isophorone	ND	ND	ND	50
Pentachlorophenol	ND /UJ	.54 J/	.51 J/J	1
PCB/Aroclor-1016	ND	ND	ND	0.00056 (w/DL = 0.1 to 0.9)
PCB/Aroclor-1221	ND	ND	ND	0.00056 (w/DL = 0.1 to 0.9)
PCB/Aroclor-1232	ND	ND	ND	0.00056 (w/DL = 0.1 to 0.9)
PCB/Aroclor-1242	ND	ND	ND	0.00056 (w/DL = 0.1 to 0.9)
PCB/Aroclor-1248	ND	ND	ND	0.00056 (w/DL = 0.1 to 0.9)
PCB/Aroclor-1254	ND	ND	ND	0.00056 (w/DL = 0.1 to 0.9)
PCB/Aroclor-1260	ND	ND	ND	0.00056 (w/DL = 0.1 to 0.9)

Detection Limits

Notes:
Shaded cells indicate discharge exceedances
pH data is expressed in S.U.
TSS and BOD_5 data is expressed in mg/L
Metals, VOC, SVOC and PCB data is expressed in ug/L
ND = Not detected
NE = No effluent limit established
NA = Sample not analyzed for this compound

Suffix Definitions:
_/ = Data qualifier added by laboratory
/_ = Data qualifier added by data validator
B = Compound is also detected in the blank
E = Compound exceeds the upper level of calibration range of instrument
J = Result is detected below the reporting limit and is an estimated concentration
Q = Sample was analyzed out of the recommended holding time
R = Quality control indicates the data is not usable
JB = Analyte is detected in the compliance sample below the reporting limit and is an estimated concentration and the compound is also detected in the method blank resulting in a potential high bia
UB = Analyte is not detected at or above the indicated concentration due to blank contaminator
UJ= Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value

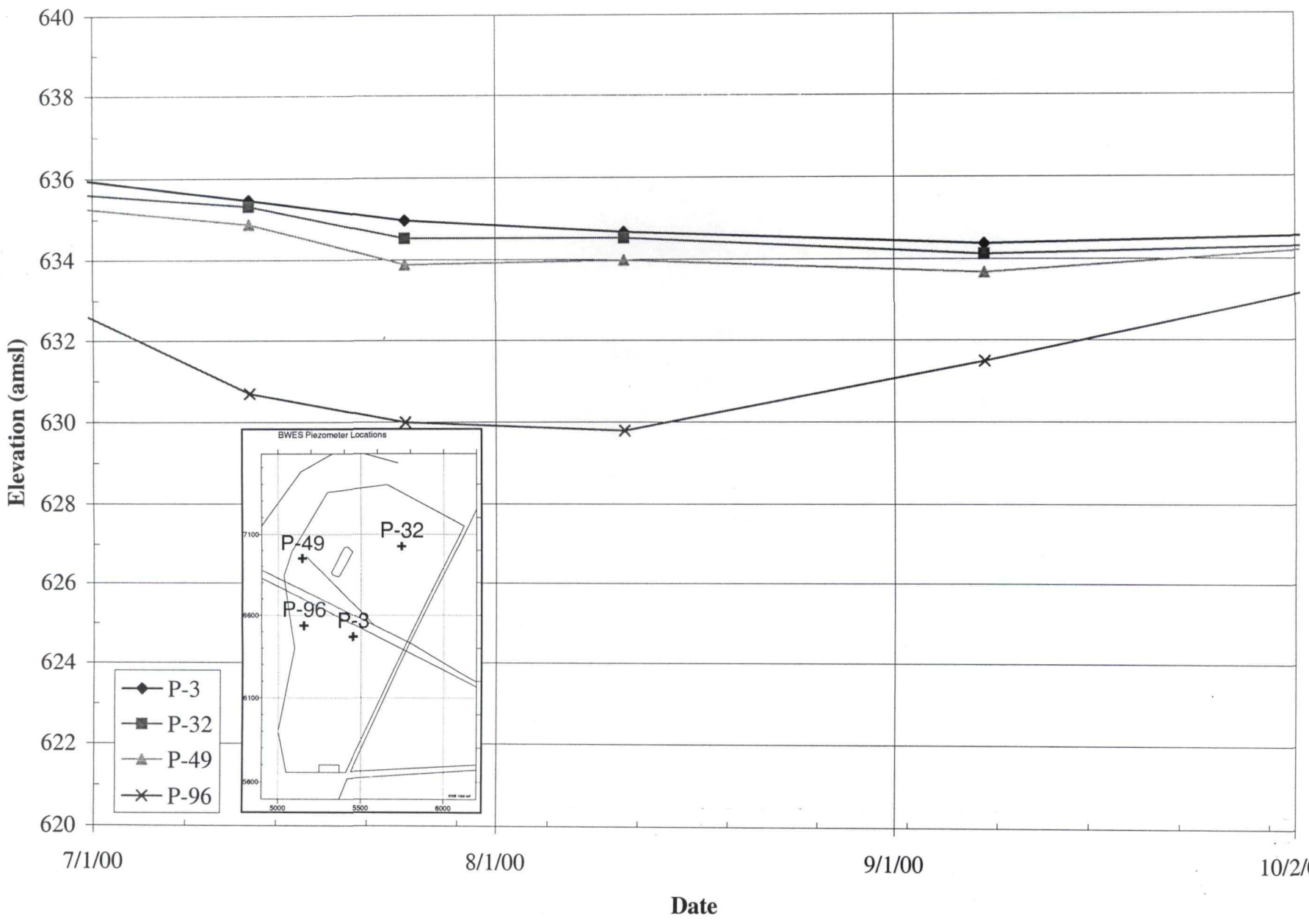

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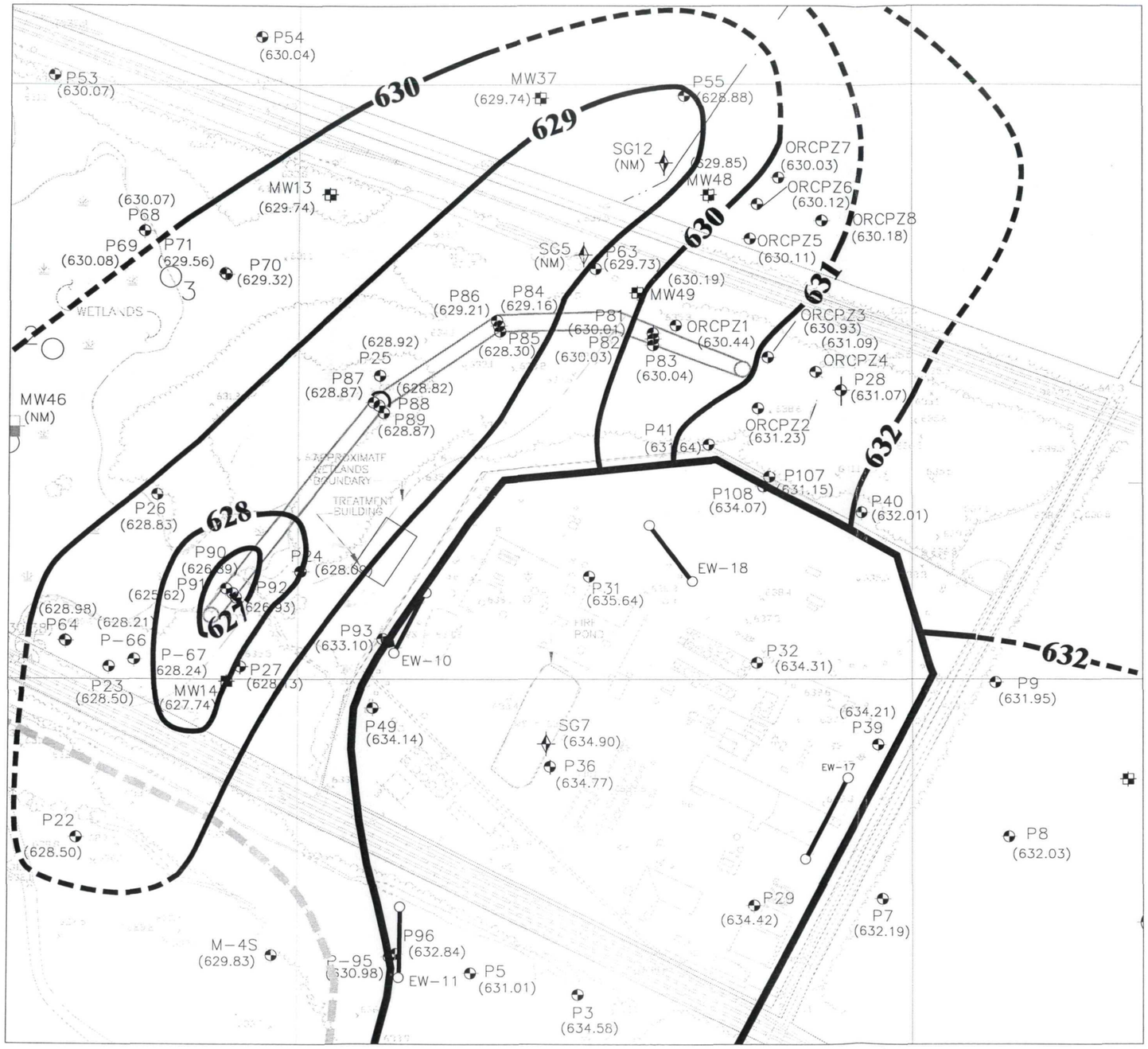
FIGURE 4.1
WATER LEVEL TRENDS INSIDE BARRIER WALL



LEGEND

- P106 — PIEZOMETER LOCATION AND DESIGNATION
- ORCPZ7 — ORC PIEZOMETER LOCATION AND DESIGNATION
- MW48 — MONITORING WELL LOCATION AND DESIGNATION
- SG12 — STAFF GAUGE LOCATION AND DESIGNATION
- (DRY) — WELL/STAFF GAUGE WAS DRY DURING MEASURING
- (NM) — NOT MEASURED
- (631.56) — GROUNDWATER ELEVATION
- BARRIER WALL
- GRIFFITH LANDFILL BOUNDARY
- PERIMETER GROUND WATER CONTAINMENT SYSTEM EXTRACTION TRENCH
- EW-11 — BWES EXTRACTION TRENCH LOCATION AND DESIGNATION
- 635 — GROUNDWATER ELEVATION CONTOUR BASED ON GROUNDWATER ELEVATION DATA

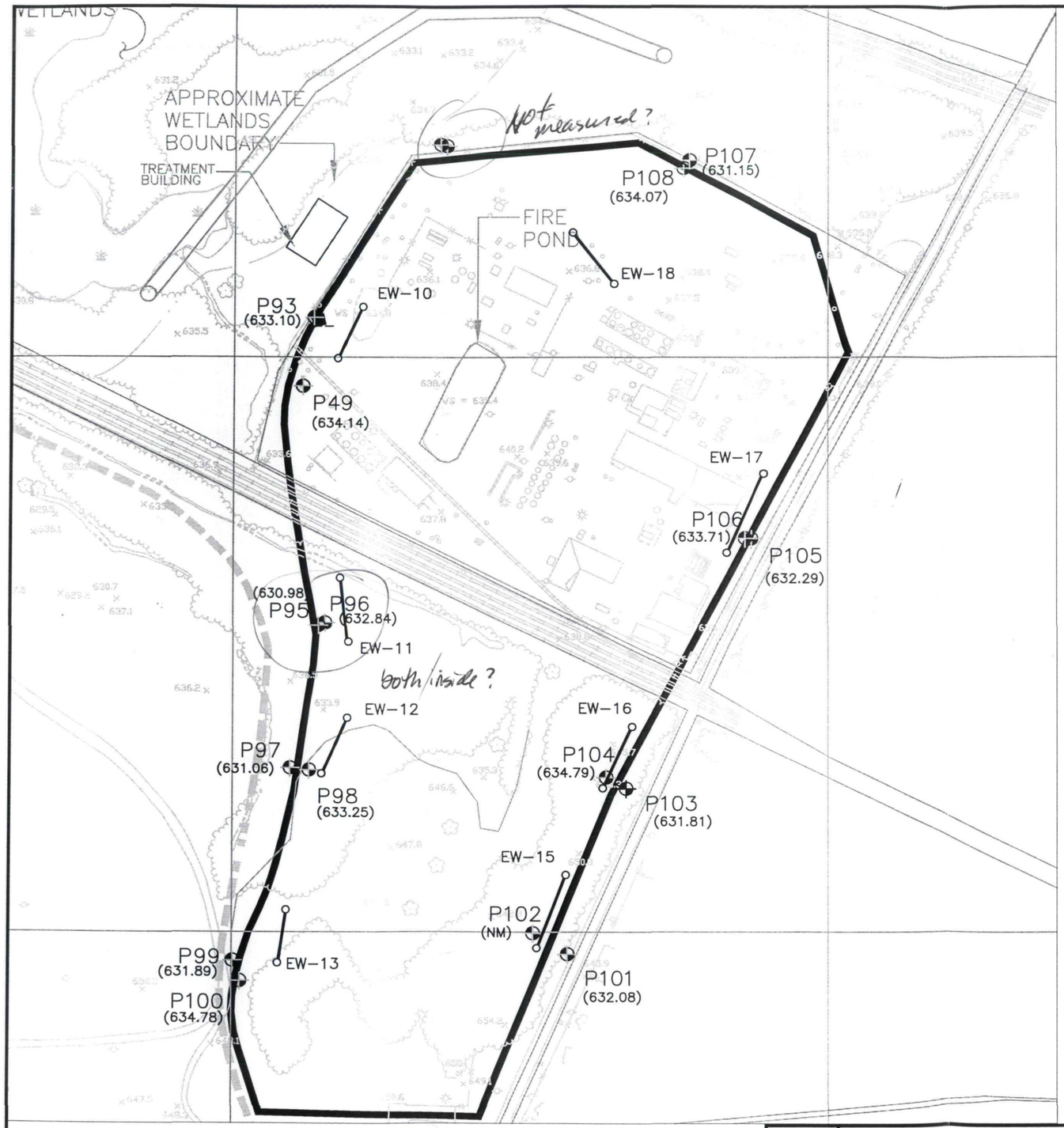
NOTE

1. GROUNDWATER ELEVATIONS WERE MEASURED AT THE SITE ON SEPTEMBER 18, 2000

0 200
SCALE IN FEET

JOB No. MW Job No. FILE: J:/209/061 acs/0116 gwtp/drawing/209601016A.dwg Plot Date:

SCALE			FIGURE
1"=200'	MONTGOMERY WATSON Chicago, Illinois	AMERICAN CHEMICAL SERVICES, INC. GRIFFITH, INDIANA	WATER TABLE ELEVATIONS NEAR THE PGCS SEPTEMBER 2000	4.2



LEGEND

P106	PIEZOMETER LOCATION AND DESIGNATION
(638.12)	GROUNDWATER ELEVATION
	BARRIER WALL
	GRIFFITH LANDFILL BOUNDARY
	PERIMETER GROUND WATER CONTAINMENT SYSTEM EXTRACTION TRENCH
EW-11	BWES EXTRACTION TRENCH LOCATION AND DESIGNATION
(NM)	NOT MEASURED

NOTES

1. GROUNDWATER ELEVATIONS WERE MEASURED THE SITE ON SEPTEMBER 18, 2000

N

0 200

SCALE IN FEET

SCALE				FIGURE
1"=200'	MONTGOMERY WATSON Chicago, Illinois	AMERICAN CHEMICAL SERVICES, INC. GRIFFITH, INDIANA	BWES GAUGING SEPTEMBER 2000	4.3

FILE: J:/209/0601 ACS/0116 GWTP/DRAWINGS/209060101168.dwg

APPENDIX A

EFFLUENT ANALYTICAL DATA

July 12, 2000 Compliance Sample
Laboratory Results

PH IN WATER ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	RESULT (Standard Unit)	REPORTING LIMIT (Standard Unit)
1.	EFFLUENT	G1024-1	7.6 J	0

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: [signature] / 744 Date: 3/24/00

5/11/00

TOTAL SUSPENDED SOLIDS ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	RESULT (mg/L)	REPORTING LIMIT (mg/L)	
1.	EFFLUENT	G1024-1	BRL	10	U J

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: _____ / 744 Date: 7/26/00

E 11/14/07

A

TEST AMERICA INC
SPECIALIZED ASSAYS ENVIRONMENTAL
2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

COMPUCHEM 2303
DIANE BYRD
501 MADISON AVENUE
CARY, NC 27513

Lab Number: 00-A97990

Sample ID: EFFLUENT I1024-1

Date Collected: 7/12/00

Project: #00-0526

Time Collected: 14:00

Project Name: ACS-89

Date Received: 7/14/00

Sampler:

Time Received: 9:00

State Certification: 387

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
BOD Set Up						7/14/00	23:55			
BOD 5 Day	2.2 J	mg/l	2.0	2.0	1	7/19/00	21:55	M.Shockley	405.1	5920
MISCELLANEOUS CHEMISTRY										
pH	7.50 J	pH Units			1	7/14/00 7/23/00	11:45	K.Bundy	150.1	5405

BOD: Sample analyzed out of hold.

ND = Not detected at the report limit.

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

7/14/00

Report Approved By: _____ Report Date: 7/24/00

Theodore J. Duello, Ph.D., Technical Serv.
Michael H. Dunn, M.S., Technical Director

Paul E. Lane, Jr., Lab Director
Glenn L. Norton, Technical Serv.

A4

SW-846 METALS

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1024

Matrix (soil/water): WATER Lab Sample ID: G1024-1

Level (low/med): LOW Date Received: 07/13/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	5.7	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.30	U		P
7439-96-5	Manganese	163			P
7439-97-6	Mercury	0.64	U		CV
7782-49-2	Selenium	5.0	U		P
7440-28-0	Thallium	4.9	U		P
7440-66-6	Zinc	0.90	U		P

11/14/02

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: G1024

Matrix: (soil/water) WATER Lab Sample ID: G1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: G1024-1B52

Level: (low/med) LOW Date Received: 07/13/00

% Moisture: not dec. _____ Date Analyzed: 07/26/00

GC Column: EQUITY624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl Chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-15-0	Carbon disulfide	0.5	U
67-64-1	Acetone	8	J
75-09-2	Methylene Chloride	2	B UJ
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
78-93-3	2-butanone MEK	3	U R
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U UJ
56-23-5	Carbon Tetrachloride	0.5	U UJ
71-43-2	Benzene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	0.2	J
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
591-78-6	2-hexanone	3	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
100-41-4	Ethylbenzene	0.5	U
108-38-3	m,p-Xylene	1	U
95-47-6	o-Xylene	0.5	U
100-42-5	Styrene	0.5	U

11/14/02

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: G1024

Matrix: (soil/water) WATER Lab Sample ID: G1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: G1024-1B52

Level: (low/med) LOW Date Received: 07/13/00

% Moisture: not dec. _____ Date Analyzed: 07/26/00

GC Column: EQUITY624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-25-2	Bromoform	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
540-59-0	1,2-Dichloroethene (total)	0.5	U
1330-20-7	Xylene (total)	0.5	U

11/14/02

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
EFFLUENT

Lab Name: COMPUCHEM Contract:
Lab Code: LIBRTY Case No.: SAS No.: SDG No.: G1024
Matrix: (soil/water) WATER Lab Sample ID: G1024-1
Sample wt/vol: 1025 (g/mL) ML Lab File ID: G1024-1B68
Level: (low/med) LOW Date Received: 07/13/00
% Moisture: _____ decanted: (Y/N)___ Date Extracted:07/13/00
Concentrated Extract Volume: 1000(uL) Date Analyzed: 07/13/00
Injection Volume: 1.0(uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
111-44-4	Bis(2-chloroethyl)ether	9	U
106-44-5	4-Methylphenol	33	U
78-59-1	Isophorone	49	U
117-81-7	bis(2-ethylhexyl)Phthalate	6	U

11/14/00

A26

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: G1024

Matrix: (soil/water) WATER Lab Sample ID: G1024-1

Sample wt/vol: 1025 (g/mL) ML Lab File ID: G1024-1JA70

Level: (low/med) LOW Date Received: 07/13/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:07/13/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 07/14/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
87-86-5	Pentachlorophenol		0.9756	U	UJ

11/14/02

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: G1024

Matrix: (soil/water) WATER Lab Sample ID: G1024-1

Sample wt/vol: 1100 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 07/13/00

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:07/13/00

Concentrated Extract Volume: 5000(uL) Date Analyzed: 07/14/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	0.45	U
11104-28-2	Aroclor-1221	0.91	U
11141-16-5	Aroclor-1232	0.45	U
53469-21-9	Aroclor-1242	0.45	U
12672-29-6	Aroclor-1248	0.45	U
11097-69-1	Aroclor-1254	0.45	U
11096-82-5	Aroclor-1260	0.45	U

11/14/00

August 2, 2000 Compliance Resample
Laboratory Results

PH ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	RESULT (Standard Unit)	REPORTING LIMIT (Standard Unit)	
1.	EFFLUENT	K1024-1	7.43	N/A	J

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: RW George 12405 8/16/00

11/16/00

TOTAL SUSPENDED SOLIDS ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	RESULT (mg/L)	REPORTING LIMIT (mg/L)
1.	EFFLUENT	K1024-1	BRL	4

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: R/ Yeung / 2405 Date: 8/16/00

8/14/00

TRITEST, INC.
3909 Beryl Road
Raleigh, NC 27607
Telephone: (919) 834-4984
Fax: (919) 834-6497
NC/WW Cert.#: 067

B

Laboratory Report

--- Prepared for ---

Mr. Charles Cabaniss
Test America, Inc.
2700 Gateway Centre
Suite 625
Morrisville, NC 27560

Project ID: 01
Project Info: ACS-89 / 00-0616

Report Date: 8/10/00
Date Received: 8/03/00

Work Order #: 0008-00169

Cust. Code: HY9699
Cust. P.O.#:

No.	Sample ID	Date Sampled	Time Sampled	Matrix	Condition
001	EFFLUENT / 00-0616	8/02/2000	14:00	WW	See COC

Test Performed	Method	Results	Tech	Analyzed	Qual
Biochemical Oxygen Demand	EPA 405.1	<2.0 mg/L	ELC	8/03/00	UJ

Report certified by:

for Tritest, Inc.

11/14/00

SW846 METALS

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: K1024

Matrix (soil/water): WATER Lab Sample ID: K1024-1

Level (low/med): LOW Date Received: 08/03/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	3.4	U		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.30	U		P
7439-96-5	Manganese	62.4			P
7439-97-6	Mercury	0.64	U		CV
7782-49-2	Selenium	5.0	U		P
7440-28-0	Thallium	4.9	U		P
7440-66-6	Zinc	21.8			P

11/14/00

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

B1

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: K1024

Matrix: (soil/water) WATER Lab Sample ID: K1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: K1024-1RA56

Level: (low/med) LOW Date Received: 08/03/00

% Moisture: not dec. _____ Date Analyzed: 08/15/00

GC Column: EQUITY624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	0.5	U	
75-01-4	Vinyl Chloride	0.5	U	
74-83-9	Bromomethane	0.5	U	
75-00-3	Chloroethane	0.5	U	
75-35-4	1,1-Dichloroethene	0.5	U	
75-15-0	Carbon disulfide	0.5	U	
67-64-1	Acetone	3		J
75-09-2	Methylene Chloride	1		
156-60-5	trans-1,2-Dichloroethene	0.5	U	
75-34-3	1,1-Dichloroethane	0.5	U	
156-59-2	cis-1,2-Dichloroethene	0.5	U	
78-93-3	2-butanone	3	U	R
67-66-3	Chloroform	0.5	U	
71-55-6	1,1,1-Trichloroethane	0.5	U	
56-23-5	Carbon Tetrachloride	0.5	U	
71-43-2	Benzene	0.5	U	
107-06-2	1,2-Dichloroethane	0.5	U	
79-01-6	Trichloroethene	0.5	U	
78-87-5	1,2-Dichloropropane	0.5	U	
75-27-4	Bromodichloromethane	0.5	U	
10061-01-5	cis-1,3-Dichloropropene	0.5	U	
108-10-1	4-Methyl-2-pentanone	3	U	
108-88-3	Toluene	0.2	J	
10061-02-6	trans-1,3-Dichloropropene	0.5	U	
79-00-5	1,1,2-Trichloroethane	0.5	U	
127-18-4	Tetrachloroethene	0.5	U	
591-78-6	2-hexanone	3	U	
124-48-1	Dibromochloromethane	0.5	U	
108-90-7	Chlorobenzene	0.5	U	
100-41-4	Ethylbenzene	0.5	U	
108-38-3	m,p-Xylene	1	U	
95-47-6	o-Xylene	0.5	U	
100-42-5	Styrene	0.5	U	

FORM I VOA

11/14/02

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: K1024

Matrix: (soil/water) WATER Lab Sample ID: K1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: K1024-1RA56

Level: (low/med) LOW Date Received: 08/03/00

% Moisture: not dec. _____ Date Analyzed: 08/15/00

GC Column: EQUITY624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-25-2	Bromoform	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
540-59-0	1,2-Dichloroethene (total)	0.5	U
1330-20-7	Xylene (total)	0.5	U

11/14/00

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: K1024

Matrix: (soil/water) WATER Lab Sample ID: K1024-1

Sample wt/vol: 500 (g/mL) ML Lab File ID: K1024-1B64

Level: (low/med) LOW Date Received: 08/03/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:08/07/00

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/11/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
111-44-4	Bis(2-chloroethyl)ether	10	U
106-44-5	4-Methylphenol	10	U
78-59-1	Isophorone	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	10	U

11/14/00

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: K1024

Matrix: (soil/water) WATER Lab Sample ID: K1024-1

Sample wt/vol: 500 (g/mL) ML Lab File ID: K1024-1B70

Level: (low/med) LOW Date Received: 08/03/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 08/07/00

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/12/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
87-86-5	Pentachlorophenol	0.5423	J

FORM I SV

11/14/00

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: K1024

Matrix: (soil/water) WATER Lab Sample ID: K1024-1

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 08/03/00

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:08/07/00

Concentrated Extract Volume: 2500(uL) Date Analyzed: 08/08/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	0.50	U
11096-82-5	Aroclor-1260	0.50	U

11/14/00

September 14, 2000 Compliance Sample
Laboratory Results

PH IN WATER ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	RESULT (Standard pH units)	REPORTING LIMIT (Standard pH units)
1.	EFFLUENT	M1024-1	7.48	N/A

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: R J George / 2405 Date: 9/26/00

11/14/00

TOTAL SUSPENDED SOLIDS ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	RESULT (mg/L)	REPORTING LIMIT (mg/L)
1.	EFFLUENT	M1024-1	4.3	4

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: [signature] / 2405 Date: 9/26/00

11/14/00

TRITEST, INC.
3909 Beryl Road
Raleigh, NC 27607
Telephone: (919) 834-4984
Fax: (919) 834-6497
NC/WW Cert.#: 067

C6

Laboratory Report

--- Prepared for ---

Mr. Charles Cabaniss
Test America, Inc.
2700 Gateway Centre
Suite 625
Morrisville, NC 27560

Project ID: 01
Project Info: ACS-89 / 00-0757

Report Date: 9/22/00
Date Received: 9/15/00

Work Order #: 0009-00520

Cust. Code: HY9699
Cust. P.O.#:

No.	Sample ID	Date Sampled	Time Sampled	Matrix	Condition
001	ACS-89 EFF.	9/14/2000	14:00	WW	See COC

Test Performed	Method	Results	Tech	Analyzed	Qual
Biochemical Oxygen Demand	EPA 405.1	<2.0 mg/L	ELC	9/15/00	

Report certified by:

David Daniel

for Tritest, Inc.

11/14/00

C4

SW-846 METALS

I

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: M1024

Matrix (soil/water): WATER Lab Sample ID: M1024-1

Level (low/med): LOW Date Received: 09/15/00

% Solids: 0.0

Date analyzed ?

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	96.2	B		P
7440-36-0	Antimony	1.9	U		P
7440-38-2	Arsenic	3.4	U		P
7440-39-3	Barium	111			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	119000			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	5.2			P
7440-50-8	Copper	2.3	B		P
7439-89-6	Iron	1020			P
7439-92-1	Lead	2.0	U		P
7439-95-4	Magnesium	25300			P
7439-96-5	Manganese	326			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	35.8			P
7440-09-7	Potassium	12400			P
7782-49-2	Selenium	5.0	U		P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	62200			P
7440-28-0	Thallium	4.9	U		P
7440-62-2	Vanadium	3.1	B		P
7440-66-6	Zinc	13.6	B		P

11/14/00

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

C1

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: M1024

Matrix: (soil/water) WATER Lab Sample ID: M1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: M1024-171

Level: (low/med) LOW Date Received: 09/15/00

% Moisture: not dec. _____ Date Analyzed: 09/28/00

GC Column: EQUITY624 ID: 0.53 (mm) Dilution Factor: 50.0 why so high?

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	25	U	UJ
75-01-4	Vinyl Chloride	25	U	
74-83-9	Bromomethane	25	U	
75-00-3	Chloroethane	25	U	
75-35-4	1,1-Dichloroethene	25	U	
75-15-0	Carbon disulfide	25	U	
67-64-1	Acetone	130	U	R
75-09-2	Methylene Chloride	25	U	UJ
156-60-5	trans-1,2-Dichloroethene	25	U	
75-34-3	1,1-Dichloroethane	25	U	
156-59-2	cis-1,2-Dichloroethene	25	U	
78-93-3	2-butanone	130	U	R
67-66-3	Chloroform	25	U	UJ
71-55-6	1,1,1-Trichloroethane	25	U	
56-23-5	Carbon Tetrachloride	25	U	
71-43-2	Benzene	25	U	
107-06-2	1,2-Dichloroethane	25	U	
79-01-6	Trichloroethene	25	U	
78-87-5	1,2-Dichloropropane	25	U	
75-27-4	Bromodichloromethane	25	U	
10061-01-5	cis-1,3-Dichloropropene	25	U	
108-10-1	4-Methyl-2-pentanone	130	U	
108-88-3	Toluene	25	U	
10061-02-6	trans-1,3-Dichloropropene	25	U	
79-00-5	1,1,2-Trichloroethane	25	U	
127-18-4	Tetrachloroethene	25	U	
591-78-6	2-hexanone	130	U	
124-48-1	Dibromochloromethane	25	U	
108-90-7	Chlorobenzene	25	U	
100-41-4	Ethylbenzene	25	U	
108-38-3	m,p-Xylene	50	U	
95-47-6	o-Xylene	25	U	
100-42-5	Styrene	25	U	

11/14/02

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: M1024

Matrix: (soil/water) WATER Lab Sample ID: M1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: M1024-171

Level: (low/med) LOW Date Received: 09/15/00

% Moisture: not dec. _____ Date Analyzed: 09/28/00

GC Column: EQUITY624 ID: 0.53 (mm) Dilution Factor: 50.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
75-25-2	Bromoform	25	U	UJ
79-34-5	1,1,2,2-Tetrachloroethane	25	U	↓
106-46-7	1,4-Dichlorobenzene	25	U	
540-59-0	1,2-Dichloroethene (total)	25	U	
1330-20-7	Xylene (total)	25	U	

11/14/02

C29

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.: EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: M1024

Matrix: (soil/water) WATER Lab Sample ID: M1024-1

Sample wt/vol: 1025 (g/mL) ML Lab File ID: M1024-1A64

Level: (low/med) LOW Date Received: 09/15/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/19/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
111-44-4	Bis(2-chloroethyl)ether	9.6	U
106-44-5	4-Methylphenol	10	U
78-59-1	Isophorone	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	6.0	U

11/14/02

C26

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: M1024

Matrix: (soil/water) WATER Lab Sample ID: M1024-1

Sample wt/vol: 1025 (g/mL) ML Lab File ID: M1024-1A60

Level: (low/med) LOW Date Received: 09/15/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/21/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
87-86-5	Pentachlorophenol	0.51	J

J

FORM I SV

11/14/00

C3

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: M1024

Matrix: (soil/water) WATER Lab Sample ID: M1024-1

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 09/15/00

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:09/18/00

Concentrated Extract Volume: 2500(uL) Date Analyzed: 09/19/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	0.50	U
11096-82-5	Aroclor-1260	0.50	U

11/9/00